

Abstract

A two-input, two-output multiplexer circuit has two tri-state inverter circuits and two switch circuits. The multiplexer outputs may be interchanged depending
5 on a control signal. Each tri-state inverter circuit is configured to receive one of the inputs, invert it, and provide the corresponding inverted signal at the corresponding multiplexer output when the control signal corresponds to a first logic level. If the control signal corresponds to a second logic level: each switch circuit is configured to turn on, and each tri-state inverter circuit is configured to provide a high-impedance
10 output. The first switch circuit is configured to couple the first inverted signal to the second multiplexer output when the first switch circuit is on. Similarly, the second switch circuit is configured to couple the second inverted signal to the first multiplexer output when the second switch circuit is on.